that the final disposition of this case await the final resolution of Company's electric case in Docket No. RPU-83-24. On December 14, 1983, an addendum to the stipulation and a joint motion to approve the addendum to were filed. The addendum clarifies a section of the stipulation and resolves the sole fact and issue reserved for litigation. We have reviewed the terms of the stipulation and addendum and find them to be just and reasonable and consistent with recent decisions of this Commission. Therefore, we will grant the joint motions to approve the stipulation and the addendum to the stipulation.

The Commission considers it regrettable that the parties consider the issue of whether Iowa Gas is charging customers for plant not required to provide adequate service as a de minimis issue. As natural gas sales in Iowa continue to decline due to consumer conservation and fuel switching, we cannot continue to spread all fixed costs to remaining volumes. The current scheme frustrates the average consumer, who asks, "Why should I conserve when conserving increases my bill?"

As some point in the near future, this issue must be adequately and innovatively presented to the Commission for decision. If consumers are to be served, and if the gas distribution companies in this state are to remain viable companies, we simply must find a way to structure rates which addresses the changing market conditions for natural gas.

Continuing the "business as usual" method of spreading constant fixed costs over an ever-dwindling sales volume will only speed market deterioration. Current studies by the Rates Research and Policy Division of the Commission empirically demonstrate that the reaction by customers to retail price increases is to further reduce usage.

Far from being a small issue, the Commission is of the opinion that this is the natural gas issue to be addressed by state regulatory bodies in the coming years.

FINDINGS OF FACT

1. Company's proposed interim rate increase identified as TF-83-507 is approved.

2. Company's "Motion for Approval of Corporate Undertaking" will be approved.

3. The terms of the stipulation filed December 5, 1983, and addendum filed December 14, 1983, are just and reasonable, are consistent with the precedents of this Commission, and will aid in the determination of just and reasonable rates for Company.

CONCLUSION OF LAW

The Commission has jurisdiction over this matter.

IT IS THEREFORE ORDERED:

1. The Company's proposed interim rates are approved in their entirety.

2. Company's interim rates will take effect with usage on and after January 1, 1984.

3. Company's corporate undertaking is approved.

4. All temporary rates approved by the Commission in this proceeding will be implemented subject to refund with interest on such terms and conditions as the Commission may order.

5. Company shall file with the Commission, within twenty-five (25) days of the end of each month, a report attested to by an officer of the Company, which states:

A. Total revenue by the current month, by category.

B. Revenue for the month, by category, billed or collected in excess of former rates.

C. A cumulative total to the end of each successive month of all revenue billed or collected in excess of former rates.

6. The stipulation filed in this docket on December 5, 1983, and the addendum to the stipulation filed December 14, 1983, are hereby approved.

IOWA STATE COMMERCE COMMISSION

Chairperson

Commissioner

ATTEST:

Executive Secretary, Assistant to

Commissioner

Dated at Des Moines, Iowa, this 23rd day of December, 1983.

STATE OF IOWA

BEFORE THE IOWA STATE COMMERCE COMMISSION

IN RE: IOWA POWER AND LIGHT COMPANY (IOWA GAS)	DOCKET NO. RPU-83-38

JOINT MOTION TO APPROVE ADDENDUM TO STIPULATION

COME NOW Iowa Gas Company, an operating division of Iowa Power and Light Company (Iowa Gas) and the Office of Consumer Advocate (Consumer Advocate) and for their joint motion request the Commission to enter an order approving the attached Addendum to Stipulation as incorporated in the Stipulation executed by the parties on December 5, 1983, in this docket.

Respectfully submitted,

IOWA GAS COMPANY, AN OPERATING DIVISION OF IOWA POWER AND LIGHT COMPANY

By Pamela L. Prairie
Pamela L. Prairie
Senior Attorney

666 Grand Avenue
Des Moines, Iowa 50303
Telephone: (515) 281-2926

Dated this 14th day of December, 1983.

OFFICE OF CONSUMER ADVOCATE

By Alice J. Hyde
Alice J. Hyde
Attorney

Lucas State Office Building
Des Moines, Iowa 50319
Telephone: (515) 281-5984

Dated this 14th day of December, 1983.

STATE OF IOWA

BEFORE THE IOWA STATE COMMERCE COMMISSION

IN RE: IOWA POWER AND LIGHT COMPANY (IOWA GAS)	DOCKET NO. RPU-83-38

ADDENDUM TO STIPULATION

ARTICLE I

On December 5, 1983, Iowa Gas Company, an operating division of Iowa Power and Light Company (Iowa Gas) and the Office of Consumer Advocate (Consumer Advocate) executed and filed with the Commission a Stipulation and Joint Motion To Approve Stipulation And Establish Procedural Schedule resolving certain fact issues in Docket No. RPU-83-38. This Addendum to the Stipulation has been prepared and executed by the signatories for the purpose of clarification of the intent of Article X, Section C, first paragraph of the Stipulation and resolution of the fact issue reserved for litigation in the Stipulation as herein provided and is applicable to Docket No. RPU-83-38 only. This Addendum to Stipulation is incorporated in the Stipulation as if addressed therein.

ARTICLE II

Article X, Section C, first paragraph of the Stipulation is amended by deleting the paragraph and substituting therefor:

The Commission's decision in Docket No. RPU-83-24 on the issues addressed in this Article X will be considered final and determinative with respect to Article X when all administrative and judicial remedies with respect to the decision on those issues in Docket No. RPU-83-24 have been exhausted. At that time, those issues in this Docket No. RPU-83-38 will not be subject to further administrative or judicial appeal or review.

ARTICLE III

Article XVI and XVII of the Stipulation reserve for litigation the issue of whether Iowa Gas has plant in service in excess of that required to provide adequate service to customers. The signatories agree initial review indicates that an adjustment, if any, to the revenue requirement which would be appropriate upon presentation of evidence concerning the issue would be de minimus, and for purposes of this proceeding only, the issue is resolved without further presentation, fully subject to the limitations set forth in Article V of the Stipulation.

IOWA GAS COMPANY, AN OPERATING DIVISION OF IOWA POWER AND LIGHT COMPANY

By Pamela L. Prairie
Pamela L. Prairie
Senior Attorney

666 Grand Avenue
Des Moines, Iowa 50303
Telephone: (515) 281-2925

ATTORNEY FOR IOWA GAS COMPANY, AN OPERATING DIVISION OF IOWA POWER AND LIGHT COMPANY

Dated this 14th day of December, 1983.

OFFICE OF CONSUMER ADVOCATE

By Alice J. Hyde
Alice J. Hyde
Attorney

Lucas State Office Building
Des Moines, Iowa 50319
Telephone: (515) 281-5984

ATTORNEY FOR THE OFFICE OF CONSUMER ADVOCATE

Dated this 14th day of December, 1983.

STATE OF IOWA

BEFORE THE IOWA STATE COMMERCE COMMISSION

IN RE: IOWA POWER AND LIGHT COMPANY (IOWA GAS)	DOCKET NO. RPU-83-38

JOINT MOTION TO APPROVE STIPULATION AND ESTABLISH PROCEDURAL SCHEDULE

COME NOW Iowa Gas Company, an operating division of Iowa Power and Light Company (Iowa Gas) and the Office of Consumer Advocate and for their joint motion state:

1. Filed concurrently herewith is a Stipulation executed by Iowa Gas and Consumer Advocate for the purpose of resolving certain fact issues in this case.

2. The Stipulation represents a reasonable resolution of the fact issues addressed therein; approval of the Stipulation will reduce the time and resources that would otherwise be expended by the parties and the Commission in the disposition of this case; and therefore, approval of the Stipulation is in the public interest.

3. Iowa Gas and Consumer Advocate propose the following procedural schedule be adopted to dispose of the issue which remains to be litigated in this proceeding:

December 20, 1983 - Iowa Gas files testimony

January 30, 1984 - Consumer Advocate files testimony

February 13, 1984 - Iowa Gas files rebuttal testimony

February 27, 1984 - Hearing

WHEREFORE, Iowa Gas and Consumer Advocate request the Commission to approve the Stipulation in its entirety without condition or modification, and establish the procedural schedule as proposed herein.

Respectfully submitted,

IOWA GAS COMPANY,
an operating division of
IOWA POWER AND LIGHT COMPANY

By Pamela L. Prairie
Pamela L. Prairie
666 Grand Avenue
Des Moines, Iowa 50303
Telephone: (515) 281-2926

ATTORNEY FOR IOWA POWER
AND LIGHT COMPANY

OFFICE OF CONSUMER ADVOCATE

By Gary D. Stewart
Gary D. Stewart
Attorney

and

By Alice J. Hyde
Alice J. Hyde
Attorney

Lucas State Office Building
Des Moines, Iowa 50319
Telephone: (515) 281-5984

ATTORNEYS FOR THE OFFICE OF
CONSUMER ADVOCATE

STATE OF IOWA

BEFORE THE IOWA STATE COMMERCE COMMISSION

IN RE: IOWA POWER AND LIGHT COMPANY (IOWA GAS)	)	DOCKET NO. RPU-83-38

STIPULATION

Introduction

On October 3, 1983, Iowa Gas Company, an operating division of Iowa Power and Light Company (Iowa Gas) filed with the Iowa State Commerce Commission a revised gas tariff identified as TF-83-506 proposed to become effective November 4, 1983, which would increase Iowa Gas's annual gas revenues by approximately $3.9 million or 2.7 percent. By order of October 28, 1983, the Commission docketed the case as a formal proceeding and instituted an investigation of the reasonableness of the proposed rate increase.

ARTICLE II

Purpose

This Stipulation has been prepared and executed by the signatories for the sole purpose of resolving certain fact issues in Docket No. RPU-83-38 as herein provided and is applicable to Docket No. RPU-83-38 only. This Stipulation is not applicable to Iowa Gas's Application for Interim Rate

Relief in Docket No. RPU-83-33. In consideration of the mutual agreements hereinafter set forth, the signatories hereby stipulate as follows.

ARTICLE III

Joint Motion

Upon execution of this Stipulation, the signatories shall file the same with the Commission together with a joint motion requesting that the Commission issue an order approving this Stipulation in its entirety without condition or modification, and establish a procedural schedule for disposition of the issue remaining to be litigated.

ARTICLE IV

Condition Precedent

This Stipulation shall not become effective unless and until the Commission enters an order approving the same in its entirety without condition or modification.

ARTICLE V

Privilege and Limitation

This Stipulation shall become binding upon the signatories upon its execution, provided, however, that if this Stipulation does not become effective in accordance with Article IV, above, it shall be null, void and privileged. This Stipulation is intended to relate only to the specific matters referred to herein; no signatory waives any claim or right which it may otherwise have with respect to any matter not expressly provided for herein; no signatory shall be deemed to have approved, accepted, agreed or consented to any ratemaking principle, any method of cost of service determination, or any method of cost allocation underlying the provisions of this Stipulation or be prejudiced or bound thereby in any other current or future proceeding before the Commission; and no signatory shall directly or indirectly refer as precedent to this Stipulation or that part of any order of the Commission referring to this Stipulation in any other current or future Iowa Gas rate proceeding before the Commission except (1) with respect to an application for interim rate relief, provided, however, that if a signatory makes such a reference with respect to an application for interim rate relief, then, with respect to such application for interim rate relief, the other signatory shall not be bound by the resolution of the matter in this Stipulation identified by such reference, or (2) in response to such a reference by a party not a signatory to this Stipulation.

ARTICLE VI

Test Period

The justness and reasonableness of rates in this case shall be determined on the basis of an annual revenue requirement determined on the basis of a test year ending June 30, 1983, subject to pro forma adjustments as determined by the Commission.

ARTICLE VII

Capital Structure and Costs of Long-Term Debt and Preferred Stock

The capital structure and costs of long-term debt and preferred stock to be used to determine the annual revenue requirement in this case shall be:

	Ratio	13-Month Average Balance	Average Cost	Cost Rate	Cost Of Capital
Long-term debt	49.485%	$333,827,076	$30,763,284	9.215%	4.560%
Preferred stock	10.836%	$ 73,100,430	$ 5,777,381	7.903%	0.856%
Common equity	39.679%	$267,675,127		*	*

* See Article X, below

ARTICLE VIII

Rate Base

The rate base to be used to determine the annual revenue requirement in this case shall be determined as provided herein. The rate base shall be the test year thirteen-month average net original cost of investment in gas plant in service, common plant allocated to gas operations, and working capital, including pro forma adjustments as provided herein. The rate base set forth in this article shall be adjusted pursuant to Article X herein.

RATE BASE

Line No.	Description	Amount
1.	Gas Plant in Service	
2.	Classified	$ 93,888,000
3.	Not Classified	281,000
4.	Completed Construction Work in Progress	470,000
5.	Gas Leases	294,000
6.	Common Plant Allocated to Gas Operation	5,473,000
7.	Accumulated Provision For Depreciation & Amortization	(38,260,000)
8.	Net Utility Plant	62,146,000
9.	Working Capital	3,968,000
10.	Other Rate Base Components	
11.	Liberalized Depreciation	(6,955,000)
12.	Investment Tax Credit-3%	(219,000)
13.	Advances for Construction	(1,471,000)
14.	Prior Rate Refund Balances	16,000
15.	Customer Meter Deposits	(460,000)
16.	Unclaimed Customer Deposit Checks	(29,000)
17.	Major Loss Operating Reserve	(373,000)
18.	Total Gas Rate Base	$ 56,623,000

ARTICLE IX

Net Operating Income

The net operating income to be used to determine the test year revenue deficiency and the annual revenue requirement in this case shall be determined as provided herein. Adjusted test year net operating income is based on weather-normalized sales of 300,028,658 Ccf. The income statement set forth in this Article shall be adjusted pursuant to Article X below.

INCOME STATEMENT

Line No.	Description	Amount
1.	Operating Revenue	$158,280,000
2.	Operating Expenses	
3.	Operation and Maintenance	145,531,000
4.	Depr. & Amort.	3,557,000
5.	General Taxes	2,283,000
6.	Income Taxes	1,812,000
7.	Total Oper. Exp.	153,183,000
8.	Income From Subsidiary	14,000
9.	Net Operating Income	$ 5,111,000

ARTICLE X

Adjustments Contingent Upon Docket No. RPU-83-24

A. Return on Common Equity.

The return on common equity to be used to determine the annual revenue requirement in this case shall be the same as the return on common equity used by the Commission in Docket No. RPU-83-24 to determine Iowa Power's annual revenue requirement.

B. The adjustments described in this Section shall be made as provided herein to the rate base and income statement set forth in Articles VIII and IX, respectively. The amounts of the adjustments are contingent upon the Commission's decision in Docket No. RPU-83-24 as provided herein.

1. Delayed Payment Charges.

Revenues included in the income statement shall include revenues from delayed payment charges. If in Docket No. RPU-83-24 the Commission determines that an adjustment to revenues from delayed payment charges should be made based on the statutory amendments contained in 70th G.A., House File 312, Section 37, then the revenues included in the income statement set forth in Article IX shall be adjusted in the identical manner.

2. Unbilled Revenues.

If in Docket No. RPU-83-24, the Commission determines that unbilled revenue shall be included in the income statement, then the revenues included in the income statement set forth in Article IX, including the income tax effect thereof, shall be adjusted in the identical manner.

3. Wages and Employee Benefits.

Operating expenses included in the income statement shall include wages and employee benefits.

a. If in Docket No. RPU-83-24, the Commission determines that adjustment to operating expenses for wages should be made to compensation of the top five executives of Iowa Power, then the expenses for wages included in the income statement set forth in Article IX shall be adjusted in the identical manner.

b. If in Docket No. RPU-83-24, the Commission determines that adjustment to operating expenses should be made for a wage increase occurring April 1983, after the close of the test year, then the expenses included in the income statement set forth in Article IX shall be adjusted in the identical manner for a wage increase occurring August 1983 after the close of the test year.

c. If in Docket No. RPU-83-24, the Commission determines that adjustment to operating expenses for employee benefits should be made, then the expenses for employee benefits included in the income statement set forth in Article IX shall be adjusted in the identical manner.

4. Remainder and Consumer Advocate Assessments.

If in Docket No. RPU-83-24 the Commission determines that adjustment to operating expenses should be made for the Commission remainder assessment and Office of Consumer Advocate assessment, then the expenses included in the income statement set forth in Article IX shall be adjusted in the identical manner.

5. Deferred Federal and State Income Taxes.

a. Income taxes included in the income statement shall include the provision for deferred Federal income taxes, shall be reduced for the amortization of accumulated deferred state income taxes, and shall be reduced for the amortization of accumulated deferred Federal income taxes in excess of the amount of accumulated deferred Federal income taxes required under the normalization method of accounting as determined by the Commission.

b. If in Docket No. RPU-83-24 the Commission determines the provision for deferred Federal income taxes shall be 41.63 percent of the difference between the deduction for accelerated depreciation claimed on the Federal income tax return and what that deduction would have been using a straight-line method of depreciation, then the income taxes included in the income statement set forth in Article IX shall be: (1) adjusted to include a provision for deferred Federal income taxes calculated in the following manner: (A) The provision for deferred Federal income taxes on account of the use of accelerated depreciation shall equal 41.63 percent of the difference between the test year accelerated depreciation deduction and what that deduction would have been utilizing straight-line depreciation rates based upon guideline lives excluding salvage and cost of removal; (B) The provision for deferred Federal income taxes on account of the use of the ACRS deduction with respect to property placed in service on or after January 1, 1981 shall equal 41.63 percent of the difference between the test year ACRS deduction and what that deduction would have been utilizing the book depreciation rates and the tax bases of the property;

(2) shall be reduced for amortization of accumulated deferred state income taxes; and (3) shall be reduced for the amortization of accumulated deferred Federal income taxes in excess of the amount of deferred Federal income taxes that would have been accumulated using the tax rate and methods stated in (1) (A) and (B), above.

c. If in Docket No. RPU-83-24 the Commission determines the provision for deferred Federal income taxes shall be 46 percent of the difference between the deduction for accelerated depreciation claimed on the Federal income tax return and what that deduction would have been using a straight-line method of depreciation, then the income taxes included in the income statement set forth in Article IX shall be: (1) adjusted to include a provision for deferred Federal income taxes calculated in the following manner: (A) the provision for deferred Federal income taxes on account of the use of accelerated depreciation shall equal 46 percent of the difference between the test year accelerated depreciation deduction and what that deduction would have been utilizing straight-line depreciation rates based upon guideline lives excluding salvage and cost of removal; (B) The provision for deferred Federal income taxes on account of the use of the ACRS deduction with respect to property placed in service on or after January 1, 1981 shall equal 46 percent of the difference between the test year ACRS deduction and what that deduction would have been utilizing the book depreciation rates and the tax bases of the property; (2) shall be reduced for amortization of accumulated deferred state income taxes; and (3) shall be reduced for the amortization of accumulated deferred Federal income taxes, if any, in excess of the amount of deferred Federal income taxes that would have been accumulated using the tax rate and methods stated in (1)(A) and (B), above.

6. Interest Synchronization Adjustment.

If in Docket No. RPU-83-24 the Commission determines that an adjustment to income taxes should be made on account of an interest synchronization adjustment, the income taxes included in the income statement set forth in Article IX shall be adjusted in the identical manner.

7. Advertising.

Operating expenses included in the income statement shall include advertising expenses except as provided herein. If in Docket No. RPU-83-24 the Commission determines that adjustment to operating expenses should be made for "area development" advertising and rate case expenses included in Accounts 909.4 and 916, then the expenses for advertising included in the income statement set forth in Article IX shall be adjusted in the identical manner.

8. Unclaimed Check Balances.

If in Docket No. RPU-83-24 the Commission determines that adjustment to rate base should be made for unclaimed check balances to eliminate prior period rate refund and unclaimed customer deposits, then rate base as set forth in Article VIII shall be adjusted in the identical manner.

C. Final Decision in Docket No. RPU-83-24.

The Commission's decision in Docket No. RPU-83-24 on the issues addressed in this Article X shall not be considered final and determinative with respect to Article X until all administrative and judicial remedies with respect to the decision on those issues in Docket No. RPU-83-24 have been exhausted.

If a judicial proceeding is commenced with respect to the decision on those issues in Docket No. RPU-83-24, such proceeding shall constitute "intervening judicial proceedings" in this case as that phrase is used in Iowa Code Section 476.6(9) (1983). If, at the time this case is submitted for final decision, a judicial proceeding with respect to the decision on those issues in Docket No. RPU-83-24 remains pending, the Commission shall make a preliminary determination of the annual revenue requirement in this case relying, as provided herein, on the decision on those issues in Docket No. RPU-83-24 with respect to which the judicial proceeding is pending, and shall issue an order authorizing Iowa Gas, thereafter, to place into effect, subject to refund, rates based upon such preliminary annual revenue requirement or to continue in effect, subject to refund, interim rates, whichever are higher. Upon final decision in this case, all rates collected subject to refund, shall be subject to refund in the same manner and upon the same terms and conditions. Any Commission decision making a preliminary determination of the annual revenue requirement pursuant to this paragraph shall not constitute a final decision in this case, but shall be subject to the filing of a timely application for rehearing by any party.

ARTICLE XI

Allowable Net Operating Income

Allowable net operating income to be used to determine the annual revenue requirement in this case shall be computed by multiplying the rate base by the rate of return determined pursuant to Article X of this Stipulation.

ARTICLE XII

Revenue Requirement

The annual revenue requirement in this case, exclusive of franchise fee expenses which are to be recovered by the franchise fee surcharge, shall be the sum of adjusted test year operating revenue and the test year revenue deficiency. Adjusted test year operating revenue shall be determined pursuant to Article IX. The text year revenue deficiency shall be computed by subtracting the adjusted test year net operating income determined pursuant to Article IX from allowable net operating income determined pursuant to Article XI, adding additional income taxes resulting from the additional operating income at the composite effective tax rate of 51.13 percent, and adding an allowance for additional bad debt expense equal to 0.43 percent of the sum of additional income taxes and the difference between adjusted test year and allowable net operating income.

ARTICLE XIII

Rates

Upon final decision in this case a schedule of rates shall be determined which, if applied to weather-normalized sales of 300,028,658 Ccf for the test year, would have provided operating revenue which, when added to PGA revenue and miscellaneous operating revenue not including franchise fee surcharge revenue, would equal an amount not exceeding, except as a result of rounding each block of each rate to the nearest 0.01 cents per Ccf, the annual revenue requirement determined pursuant to Article XII. The schedule of rates shall be determined by uniformly increasing each block of each previously approved rate by the same cents per Ccf. The increase per Ccf shall be computed by dividing the revenue deficiency determined pursuant to Article XII by weather-normalized test year gas sales of 300,028,658 Ccf. Within 30 days of the issuance of the final decision in this case, Iowa Gas shall file the schedule of rates with the Commission for the Commission's approval.

ARTICLE XIV

Refunds

If the rates approved by the Commission pursuant to Article XIII are lower than the interim rates collected in this proceeding, then within 30 days of the Commission's approval of such rates, Iowa Gas shall file a refund plan with the Commission for the Commission's approval. The refund plan shall specify the manner in which Iowa Gas will refund to its customers all amounts collected from such customers under the interim rates in excess of the amounts which would have been collected from such customers under the schedule of rates approved by the Commission pursuant to Article XIII, together with sales taxes and interest thereon as determined by the Commission.

ARTICLE XV

Evidence Excluded

The prepared direct testimony and exhibits of Phillip D. Ehm, Francis E. Jeffries, J. Sue Rozema, James W. Hamilton, Garry W. Osborn, Robert P. Evans, Robert L. Lester and Thomas J. Sweeney filed October 3, 1983, shall not be offered into evidence by Iowa Gas in this case; and no signatory shall attempt to offer any evidence on the matters addressed by this Stipulation except in response to any such evidence offered by any party not a signatory to this Stipulation pursuant to an order of the Commission, provided that any such evidence offered by a signatory pursuant to this exception shall be fully consistent with this Stipulation and shall support the resolution of the fact issues as provided herein.

ARTICLE XVI

Evidence to be Presented

The parties shall present evidence on the issue of whether Iowa Gas has plant in service in excess of that required to provide adequate service to customers. An adjustment, if any, resulting from the Commission's findings on this issue may reduce the revenue requirement determined pursuant to this Stipulation. The signatories reserve the right to contest the appropriateness of any adjustment proposed or ordered on this issue.

ARTICLE XVII

Procedure

The signatories shall propose and file with this Stipulation a revised procedural schedule to dispose of the issue set forth in Article XVI within the 10-month deadline established in Iowa Code Section 476.6(9) (1983).

IOWA GAS COMPANY, AN OPERATING
DIVISION OF
IOWA POWER AND LIGHT COMPANY

By Pamela L. Prairie
Pamela L. Prairie
666 Grand Avenue
Des Moines, Iowa 50303
Telephone: (515) 281-2926

ATTORNEY FOR IOWA GAS COMPANY,
AN OPERATING DIVISION OF
IOWA POWER AND LIGHT COMPANY

Date: December 5 1983

OFFICE OF CONSUMER ADOVCATE

By Gary D. Stewart
Gary D. Stewart
Attorney

Alice J. Hyde
Alice J. Hyde
Attorney

Lucas State Office Building
Des Moines, Iowa 50319
Telephone: (515) 281-5984

ATTORNEYS FOR THE OFFICE
OF CONSUMER ADVOCATE

Date: December 5, 1983

DOCKET NO. 59318

Rate of Return

Respondent presented the testimony of three expert witnesses on rate of return and related matters. Dr. J. Rhoads Foster, an economist, was retained by Respondent to determine an appropriate return which Respondent should be allowed to earn from its utility operations subject to the jurisdiction of this Commission. He utilized the embedded cost of long-term debt capital and preferred stock as two of the three components of a fair rate of return. However, a range was provided with respect to long-term debt to give some consideration to the cost of additional debt capital which Respondent contemplates. The issuance of preference shares in late 1974 was not directly reflected in the capital structure utilized by Dr. Foster.

With respect to the third component of fair rate of return the cost of common stock capital to Respondent, he applied three tests of reasonableness - (1) the return on equity capital should be commensurate with the returns on investments in other enterprises having corresponding risks, (2) the prospective returns should be sufficient to attract the additional capital required by a growing business, and (3) the return should be sufficient to assure confidence in the financial integrity of the enterprise and maintain its credit.

This witness pursued four separate approaches in reaching his determination of the cost of common equity capital to the Respondent, (1) an analysis of the changes in financial and related factors, (2) an analysis of the effects of inflation on the cost of capital, (3) an application of the market value or DCF method, and (4) an application of the comparable earnings or alternative opportunity method. His utilization of these four separate approaches, based on a contemplated capital structure and anticipated cost of debt and preference stock, led him to the conclusion that the current cost of common stock capital to the Respondent is 15% to 16%, and that the total capital and fair rate of return for the Respondent, at this time, on the basis of the embedded and prospective cost of debt and preferred stock, and the cost of common equity is as follows:

Kind of Capital	Capital Structure	Cost Rates	Composite Cost
Long-term debt	53.0%	6.05-6.53%	3.21-3.46%
Preferred stock	7.0	5.96	0.42
Common stock	40.0	15.0-16.0	6.00-6.40
Total	100.0%		9.63-10.28%

Dr. Foster concluded that a fair rate of return for the Respondent is 9.8% at this time when applied to an original cost rate base and utilizing a capital structure as noted above.

The second witness, Waid R. Vanderpoel, an investment banker, presented testimony regarding the institutional investors' appraisal of common stock in general, including utility stocks, and the Respondent's in particular. He testified that institutional investors, as well as individual investors, pursue one of three broad categories of objectives:

1. Total return--combination of dividend income and price appreciation

2. Capital gains

3. Income in terms of purchasing power--dividend and price appreciation growth compared to growth of wages.

He contended that the utility investor has been extremely disappointed with the result of his commitments in utility equities, which explains to a great extent why the equity investor seeks to obtain a risk premium over the more certain return available from bonds. He further contended that the utility earnings growth rate is now far lower than the inflation rate and there has been a substantial decline in price earnings multiples.

Mr. Vanderpool attributed the decline in price earnings ratios of utility stocks to a number of reasons, principally:

1. Slow down in rate of earnings growth and even a negative growth rate in some cases,

2. Regulatory lag and absence of adequate rate relief associated with regulation,

3. Lack of confidence in utility management as being too timid in timely seeking adequate relief,

4. Past experience of utility shareholders which has been projected to future expectations,

5. Insurmountable financial, operational, environmental and inflation problems seen in the industry.

He stated that it has become, therefore, increasingly difficult to attract new stockholders and to hold existing stockholders.

He further testified that the Respondent had experienced growth in earnings fairly comparable to the utility average in the early 1960's but that recent growth has been at a much reduced rate and that dividend growth has also fallen behind the averages in recent times.

Mr. Vanderpoel concluded that, in order for utility stocks, and the Respondent's stock in particular, to again become attractive to institutional investors, equity investors must have a good chance to earn a reasonable premium over the current bond interest rates. He concluded that a 40% to 50% premium as a minimum is required, and that 15% would be a fair return rate to be applied to the book common equity of the Respondent in determining the current overall rate of return to which the Respondent is entitled; that such a level would be required to make the common stock of Respondent attractive to institutional investment managers.

The third witness, Donald H. Shaw, Respondent's Vice President-Finance, reviewed the decline in long-term debt after-tax interest coverage from 5.4 times in 1966 to 2.3 times for the 12 months ended October 31, 1974. He testified that Respondent is required to maintain after-tax coverage of at least 2.0 times. The witness further testified that coverage at this time of 2.75 to 3.0 times is required to permit financing flexibility and provide a margin of safety for earnings fluctuations and attrition of earnings. He contended that a return of about 15% on the common equity is required to provide this minimum coverage.

Mr. Shaw found that investors in Respondent's stock have not kept up with inflation and that after taking into account the increase in book value per share as well as price level changes, the purchasing power of the dividend has decreased 46% since 1965. The book value of the common equity adjusted for inflation between 1941 and June 1974 is about 77% higher than stated book value. He further concluded that in terms of purchasing power, a 15% allowed return on common equity in 1974 would produce only 8.47% in purchasing power as related to purchasing power of invested dollars when committed and below the 8.75% interest cost of the Respondent's most recent bond sale in 1970.

Mr. Shaw testified that it is expected that the Respondent will need additional capital of approximately $30,000,000 to $35,000,000 in 1975, and that its construction requirements for the five years 1975-1979 will approximate $354,000,000, of which approximately half is expected to be from external sources. He concluded that a 15% return on its common equity will enable Respondent to finance construction for the foreseeable future and satisfy customer requirements in an economic manner.

Respondent presented testimony to demonstrate the effect of inflation upon the utility industry. Respondent's Exhibit 65, calculated what capital returns would result from applying the proposed rates to an adjusted 1974 test year. The 1974 adjusted electric and gas jurisdictional operating incomes, including the increased income from the proposed rates, were divided by the jurisdictional rate bases to produce rates of return. Returns on common equity were calculated from the overall rates of return using the capital structure at the end of 1974. Respondent sought to demonstrate that even with the proposed rates the calculated overall rate of return would be substantially lower than current cost of capital found by the Respondent's witnesses.

This Commission is charged with the responsibility of determining a just and reasonable rate of return. The Commission recognizes that a utility must have sufficient annual earnings to meet operating expenses and provide a reasonable return to investors for the risks assumed. A fair rate of return would enable the utility to attract new capital for expansion and maintain the financial integrity of its investment. The Commission also recognizes that rates must be just and reasonable for the ratepayer as well.

Recognizing all of these factors, this Commission is of the opinion that a rate of return of approximately 8.75 per cent on its Original Cost Rate Base, as herein determined, for its electric operations in Illinois, and 8.95 per cent for its gas operations, resulting in a combined weighted rate of return of about 8.80% is reasonable and proper.

The Commission, having examined the entire record herein, and being fully advised in the premises, is of the opinion and finds that:

(1) Iowa-Illinois Gas and Electric Company, an Illinois corporation, is engaged in the generation and supply of electric energy and the distribution and sale of gas in Illinois and, is a public utility within the meaning of an Act entitled, "An Act concerning public utilities," as amended;

(2) the Commission has jurisdiction over Respondent and of the subject matter herein;

(3) on September 30, 1974, Respondent filed with the Commission certain revised schedules of rates for its gas and electric service applicable to its operations in Illinois, in which it proposed a general increase in rates for various classifications of service effective October 31, 1974;

(4) due notice of the filing of said rate schedules was given pursuant to law and the rules and regulations of this Commission;

(5) on October 9, 1974, the Commission suspended the proposed rates pending hearing and investigation and subsequently, on February 19, 1975, resuspended said rates until August 27, 1975;

(6) notice of the initial hearing held in this case was mailed by the Secretary of the Commission to Iowa-Illinois Gas and Electric Company, the Mayor, City Attorney and Clerk of the municipalities located within the Company's service areas in Illinois, and to other persons or entities as shown by the docket sheets maintained by the Secretary of the Commission, all in accordance with the rules and regulations of this Commission; notice of subsequent hearings was mailed by the Secretary of the Commission to such parties as are shown by the docket sheets maintained by the Commission in this case;

(7) statements of fact and conclusions reached in the prefatory part of this order are amply supported by evidence of record and are hereby adopted as findings of fact herein;

(8) methods used by the Respondent to allocate property dedicated to the public in Illinois in furnishing gas and electric service to its customers are just and reasonable and are hereby approved for purposes of this case;

(9) the Original Cost of the Respondent's used and useful electric plant in Service allocated to Illinois operations, as of December 31, 1974, is $131,487,000 for purposes of this proceeding;

(10) Accumulated Provision for Depreciation and Amortization of the Respondent's used and useful electric plant in Service, allocated to Illinois operations, as of December 31, 1974, is $34,126,000, resulting in a net Original Cost of such Plant as of such date of $97,361,000 to be used for the purposes of this case;

(11) the following items, affecting Illinois electric operations of the Respondent, as adjusted, should be treated in connection with establishing Respondent's Original Cost Rate Base for such operations:

Additions:

(a) Plant Held for Future Use	$ 132,000
(b) Nuclear Fuel in Stock	823,000
(c) Fuel Stock in Reactor - Net	998,000
(d) Environmental equipment, Quad-Cities Nuclear Power Station	724,000
(e) Fuel Stocks (Coal and Oil)	1,999,000
(f) Materials and Supplies	1,029,000
Total Additions	$5,705,000

Deductions:

(g) Contributions in Aid of Construction	$ 300,000
(h) Accumulated Deferred Income Taxes	8,971,000
(i) Electric Plant Allocable to Nonjurisdictional Operations	5,065,000
Total Deductions	$14,336,000
Net Deductions	$ 8,631,000

(12) Respondent's Original Cost Rate Base for the purpose of this proceeding, as of December 31, 1974, for its Illinois electric operations is $88,730,000;

(13) the Original Cost of the Respondent's used and useful gas plant in Service allocated to Illinois operations, as of December 31, 1974, is $37,755,000;

(14) Accumulated Provision for Depreciation and Amortization of the Respondent's used and useful gas plant in service, allocated to Illinois operations, as of December 31, 1974, is $9,033,000, resulting in a net Original Cost of such Plant as of such date of $28,722,000;

(15) the following items, affecting the Illinois gas operations of the Respondent, should be treated in connection with the establishment of an Original Cost Rate Base for such operations:

Additions:

(a) Investment in Gas Leases	$ 1,492,000
(b) Materials and Supplies	300,000
(c) Gas Stored Underground, Liquefied Petroleum Gas Supply, and Stored LNG	800,000
Total Additions	$ 2,592,000

Deductions:

(d) Contributions in Aid of Construction	$ 726,000
(e) Customer Advances for Construction	206,000
(f) Accumulated Deferred Income Taxes	2,332,000
Total Deductions	$ 3,264,000
Net Deductions	$ 672,000

(16) Respondent's Original Cost Rate Base for the purpose of this proceeding as of December 31, 1974, for its Illinois gas operations is $28,050,000;

(17) rates which were in effect prior to the authorizing of the interim rates authorized by Commission Order of November 6, 1974, and said interim rates for electric service furnished to the Illinois customers of Respondent, are inadequate and unjust in that they do not produce a reasonable return to Respondent on its investment in electric plant used in its Illinois operations and recovery of operating costs of electric service furnished to its Illinois customers;

(18) rates proposed herein by Respondent for its electric operations in Illinois would produce a rate of return of 9.42% on the Original Cost Rate Base of $88,972,000, and such proposed rates are unreasonable and unjust and should be cancelled and annulled;

(19) the Respondent should be required to file rates that will produce annual operating revenues of approximately $34,966,000 and annual operating income of approximately $7,764,000 for its electric operations in Illinois, and such annual operating income would, in turn, provide the Respondent with a rate of return of approximately 8.75% on its Original Cost Rate Base as set forth in Finding (12) hereof;

(20) Respondent should file new tariff schedules (1) adopting the Staff's proposals for its space heating Rate 105 as hereinbefore stated; (2) increasing the demand charges to the level proposed by Respondent filed on November 4, 1974 in Rates 141, 142 and 153; and

(3) providing the balance of allowable electric operating revenue by across-the-board uniform percentage increases to the energy charges contained in the interim Rates 122, 135, 141, 142, 145 and 153;

(21) rates which were in effect prior to the authorizing of the interim rates authorized by Commission Order of November 6, 1974, and said interim rates for gas service furnished to the Illinois customers of Respondent are inadequate and unjust in that they do not produce a reasonable return to Respondent on its investment in gas plant used in its Illinois operations and recovery of operating cost for gas service furnished to its Illinois customers;

(22) rates proposed herein by Respondent for its gas operations in Illinois would result in a rate of return of 9.2% on the Original Cost Rate Base of $28,050,000, and such proposed rates are unreasonable and unjust, and should be cancelled and annulled;

(23) Respondent's proposed rates designated as Ill. C.C. No. 1, 16th Revised Sheet No. 6, 13th Revised Sheet No. 7, 19th Revised Sheet No. 8, 11th Revised Sheet No. 9, 25th Revised Sheet No. 24 and 10th Revised Sheet No. 25 increasing non-residential rates for natural gas service in Illinois, are reasonable and just and should be approved; Respondent's proposed rates designated as Ill. C.C. No. 1, 17th Revised Sheet No. 5 and 8th Revised Sheet No. 26 applicable to residential natural gas service in Illinois, are unreasonable and unjust, and should be cancelled and annulled;

(24) Respondent should be required to file new rate schedules for residential gas service in Illinois, which, together with the rates approved herein for non-residential service will produce annual operating revenues of approximately $23,798,000 and annual operating income of approximately $2,510,000 for its gas operations in Illinois, and such annual operating income is calculated to provide the Respondent with a rate of return of approximately 8.95% on its Original Cost Rate Base as set forth in Finding (16) hereof;

(25) Respondent should be required to engage in a cost-of-service study, and submitting same to the than January 1, 1977;

(26) any objections and motions made in this proceeding that remain undisposed of should be considered disposed of in a manner consistent with the ultimate conclusions herein contained.

IT IS THEREFORE ORDERED that the Suspension Order entered by this Commission on October 9, 1974 and the Resuspension Order entered on February 19, 1975 be, and the same are hereby, vacated and set aside as to Iowa-Illinois Gas and Electric Company rates designated as Ill. C.C. No. 1, 16th Revised Sheet No. 6, 13th Revised Sheet No. 7, 19th Revised Sheet No. 8, 11th Revised Sheet No. 9, 25th Revised Sheet No. 24 and 10th Revised Sheet No. 25, increasing non-residential rates for natural gas service in Illinois, and said rates are permitted to become effective for service rendered on or after the date of this Order.

IT IS FURTHER ORDERED that Iowa-Illinois Gas and Electric Company rates designated as Ill. C.C. No. 1, 17th Revised Sheet No. 5 and 8th Revised Sheet No. 26, increasing the rates for residential natural gas service in Illinois be, and the same are hereby, permanently cancelled and annulled, and Respondent is hereby authorized and directed to file with this Commission revised schedules of such rates to provide additional operating revenues for residential natural gas service in Illinois of $959,000, exclusive of the 2% State add-on taxes. Said new rates are to become effective on all residential natural gas service rendered by Respondent in Illinois on or after the date said rate schedules are placed on file with this Commission.

IT IS FURTHER ORDERED that interim rates for natural gas service in Illinois allowed to become effective by virtue of an Order on Motion for Interim Rate Relief entered by the Commission November 6, 1974, be, and the same are hereby, permanently cancelled and annulled effective at such time as new rate schedules for natural gas service, filed pursuant to the provisions hereof, are permitted to become effective.

IT IS FURTHER ORDERED that interim electric service Rates 141, 142, 145 and 153, allowed to become effective by virtue of an interim order in this proceeding entered November 6, 1974, be, and the same are hereby, permanently cancelled and annulled, effective at such time as new rate schedules for electric service, filed pursuant to the provisions hereof, are permitted to become effective.

IT IS FURTHER ORDERED that Iowa-Illinois Gas and Electric Company be, and is hereby, authorized and directed to file with this Commission revised schedules of rates in accordance with the provisions of Finding (20) hereof, to provide operating revenues and operating income as set forth in Finding (19) hereof; said rates are to become effective for all electric service rendered by Respondent in Illinois on or after the date said new rate schedules are placed on file with this Commission.

IT IS FURTHER ORDERED that Respondent submit to the Commission on or before January 1, 1977, a Cost-of-Service Study for providing electric service in Illinois. Before initiating said study, Respondent is directed to consult with the Commission's Electric Engineering Staff to determine the procedure and method for making such Cost-of-Service Study.

IT IS FURTHER ORDERED that any objections and motions made in this proceeding that remain undisposed of shall be considered disposed of in a manner consistent with the ultimate conclusions contained herein.

By Order of the Commission this 21st day of August, 1975.

(SIGNED) MARVIN S. LIEBERMAN

Chairman

RLT:nms

(S E A L)

Before the

ILLINOIS COMMERCE COMMISSION

Docket No. 59318

Fair Return to

Iowa-Illinois Gas and Electric Company

DIRECT TESTIMONY OF

J. RHOADS FOSTER

Foster Associates, Inc.
Washington, D. C. 20036

November 1974

Q. Please give your name and address to the reporter.

A. My name is J. Rhoads Foster. My address is 1101 Seventeenth Street, Northwest, Washington, D. C. 20036.

Q. What is your profession?

A. I am an economist, and a senior consultant with Foster Associates, Inc., a consulting firm.

Q. What is Foster Associates?

A. Foster Associates is a group of independent consultants. The firm offers economic research and consulting services to governmental agencies, industrial groups, and individual companies in the United States and Canada.

Q. What are the principal areas of research and consulting activity with which Foster Associates is engaged?

A. The principal areas of consulting activity concern energy, public utilities, communications, the securities business, antitrust problems, and the postal service. Assignments within these areas of activity involve many issues and problems, including supply of and demand for products and services, pricing of products and services, methods of governmental regulation, proposed legislation, reasonableness of earnings, financial feasibility, cost analysis, valuation of property, industry structures, etc.

Q. What is your formal education?

A. I studied at the University of Missouri, Columbia University, and New York University. At the University

III. Cost of Common Stock Capital

Q. How have you approached a determination of the cost of common stock capital to Iowa-Illinois?

A. I have applied the three generally accepted tests of reasonableness -- (1) that the return on equity capital must be commensurate with returns on investments in other enterprises having corresponding risks, (2) that the prospective returns must be sufficient to attract the additional capital required by a growing business, and (3) that the return must be sufficient to assure confidence in the financial integrity of the enterprise and maintain its credit.

In applying these standards, I have pursued four separate or different approaches. I have reviewed changes in financial and related factors bearing on equity investment risk and cost of common equity to Iowa-Illinois. Consideration of these changes, which have become increasingly adverse since about 1965, is necessary to an understanding of the continuing loss of investor confidence and the evaluation of the evidence of the current cost of common stock capital to Iowa-Illinois and other public utilities.

Because of its significance, I considered separately the effects of inflation on the cost of capital. I have also applied the DCF or market value method, and finally considered rates of earnings on book equities of generally comparable risk -- the comparable earnings method.

Q. What is meant by alternative opportunity cost as a standard of utility earnings regulation?

A. The opportunity cost principle, which is consistent with the three generally accepted tests of reasonableness, emphasizes that the cost of using any resource for a given purpose is the return that is foregone by not using it in its next best alternative use. To a farmer, the cost of raising corn is the sacrifice of alternative crops or dairy products which the land could produce. Workers evaluate a given employment opportunity in terms of other jobs available. Similarly, the opportunity cost of equity capital to Iowa-Illinois is the earnings sacrificed by not investing in other companies of corresponding risk.

When utility rates are held at levels which preclude earnings equivalent to those available from alternative investments, investors pay lower prices for utility stocks relative to the earnings and dividends which they believe to be in prospect. This results in unfair treatment of the capital previously committed and a higher cost of capital to the utility.

III-1. Selection of Reference Groups

Q. What do you mean by the term "reference group"?

A. To apply the alternative opportunity cost standard, it is necessary to select other companies having generally similar equity investment risks or, if such companies are not available, to make adjustments for differences in investment risks and the effects of these differences on investor return requirements and the cost of common equity. Additionally, analysis of the market price behavior of the common stocks of other companies having generally similar equity investment risks may be helpful in the application of the market value or DCF method of determining a fair return for the utility.

I have selected groups of public utilities and manufacturers for these purposes, and designated them reference groups.

Q. Please identify the reference groups used to estimate the cost of common equity to Iowa-Illinois.

A. As a point of departure, I have looked to all electric and electric-gas utilities with revenues over $50 million listed on the New York Stock Exchange. There are 79 such public utilities, excluding ten holding companies and Iowa-Illinois.

Common stocks of companies in the electric and the combination electric-gas industry are relatively equity capital is higher by a similar or larger margin.

To illustrate the effect on the cost of total capital, assume that in 1964 the cost of total capital was 7.0 percent, and that the cost of senior capital, equal to 60 percent of total capital, was 4.44 percent. It follows that the cost of common equity was 10.85 percent. Assume further that cost rates are now 5.14 percentage points higher, corresponding to the rise of interest rates. Accordingly, the indicated cost is now 15.99 percent for common equity and 12.15 percent for total capital. Substituting an embedded cost rate of 6.05 percent for the current cost of senior capital, the indicated return on total book capital is now 10.0 percent.

Moreover, other factors bearing upon the equity risk premium have not been unchanged. The cost of equity capital is higher than in prior years because of the greater risks borne by equity investors, due to higher debt ratios, enormous increases in embedded cost of fixed income obligations, increases in capital structure leverage, and increases in demand relative to the supply of funds.

Q. Does the cost of capital to unregulated enterprises also increase with anticipated inflation?

A. Yes. The effect is basically the same, though differing in degree and form. The chart on page 32 of the exhibit illustrates this.

The information on inflation and dividend yields for the Iowa-Illinois stock and the index of yields on Aa public utility bonds is carried to page 32 from prior charts and is represented by the solid lines. The broken lines represent Moody's index of yields on Aa industrial bonds and dividend yields on Standard & Poor's 425 industrial stocks.

Each of these indicators -- bond yields and dividend yields -- shows the increase in investor return requirements for utilities and industrials, and the loss of investor confidence in public utility equities relative to the broad cross-section of industrials.

Yields on public utility and industrial bonds rated Aa were at about the same level in 1964, but in the third quarter of 1974, though both have increased substantially, the discount on public utility bonds produced a yield differential of more than 50 basis points.

The comparative behavior of dividend yields has been even more significant. The yield on the Iowa-Illinois stock, above the 425 industrials by about one-sixth in 1964, increased to more than two and one-half times the dividend yield on industrial stocks by the first half of 1974.

Q. You said that the effect of inflation on cost of capital is much the same for industrials as for public utilities. The chart shows, however, that the yield on the Iowa-Illinois stock has risen to nearly three times the average yield on industrial stocks. Please explain.

A. All investors require a higher rate of prospective earnings, called the inflation premium, when they expect the value of money to decline. The difference is that investors in the equity of public utilities pay a lower price per dollar of current earnings and dividends because they lack confidence that regulation will permit higher future earnings to compensate for the anticipated decline in purchasing power.

On the other hand, investments in the equities of unregulated businesses tend to hedge against the inflation risk. In a dynamic capitalistic economy, such as the competitive sector of the United States, goods and services are priced by the interaction of demand and supply in the market place. Under competition, it is not original cost but the current cost of productive assets that controls managerial decisions and determines current market prices and profits. The output of old plants is not sold in competitive markets at lower prices than the output of new plants, because costs have risen. It follows, therefore, that an increase in rate of earnings on stockholders' book equity in competitive enterprises, expressed in original cost dollars, is to be expected and is experienced, at least in the long run, when the purchasing power of the dollar has declined. Economic cost means the current and prospective costs at which a supply of goods or services can be produced. Economic motivation under conditions of growth and effective competition operates continuously to pull the prices of goods and services toward the economic cost level.

Therefore, the difference in the behavior of utility stock prices and dividend yields relative to industrials is primarily a product of regulatory policy and practice. There is no way for regulatory authority to avoid the fact of higher investor return requirements and the higher cost of equity capital. When utility rates are held at levels which preclude a prospective earnings growth equivalent to earnings expectations from other investments of corresponding risk, investors pay lower prices for utility stocks relative to the earnings and dividends believed to be in prospect.

Q. Are there additional reasons why the cost of equity capital to Iowa-Illinois and other electric utilities has risen?

A. Yes. Evaluation of the evidence on fair rate of return to Iowa-Illinois should take into account the relative energy shortage, public interest in an adequate power supply, and the effect of these factors on the cost of the needed capital.

The electric utility industry is the largest in the Nation in terms of capital employed, and is among the largest by any measure of size. It is an industry which uses extraordinarily large amounts of capital relative to business volume and revenues.

The electric industry's share of total energy used in the Nation increased from 18.7 percent in 1960 to 25.6 percent in 1972.

The Federal Power Commission has projected that the electric industry's share of total national energy consumption, including all forms of transportation, will reach 41 percent by 1990, within less than two decades.

The era of gradually declining electric rates appears to have ended. The prospect for the foreseeable future is that technological gains will not offset the rising cost from general inflation, rising fuel costs, and the higher construction and overhead costs associated with new environmental standards. Investor confidence in the electric industry has weakened as a consequence of these changes in the character of the industry, the tremendous amount of new capital which must be obtained, and regulatory decisions which do not give the companies an adequate opportunity to earn a fair return.

Q. What is the situation with respect to natural gas, the other half of the services supplied by Iowa-Illinois?

A. The domestic supply of natural gas is now deficient relative to rapidly growing demands in the United States. Deliveries to Iowa-Illinois and other gas distributors throughout the Nation are being curtailed. The costs of liquefied natural gas from foreign sources and other energy substitutes are more than twice the cost of natural gas to Iowa-Illinois under existing contracts. The cost of additional and replacement gas supplies is rising rapidly. Investment in the gas distribution business faces extraordinary risks because of these developments.

Q. Have you considered the trends in prices, earnings, and dividends for the Iowa-Illinois stock?

A. Yes.

Q. Will you please describe the chart on page 35 of your exhibit?

A. The chart shows comparatively the changes in prices, earnings, and dividends per share of the Iowa-Illinois stock as reported on a quarterly basis from 1955 through the second quarter of 1974. Earnings per share include the effect of revenues subject to refund (1Q 1972 to 2Q 1974), and in earlier years are shown before fair value depreciation. As is evident from the chart, earnings and dividends per share increased slowly during the late 1950's, but accelerated in 1961. The slopes of the lines reflect differences in growth rates. Expectations of more rapid growth were quickly capitalized in the market, resulting in sharply increasing stock prices from 1957 to 1965.

After 1965, the price declined abruptly. Investor confidence was impaired by reduced rates of earnings growth, the sharp drop of per-share earnings during 1971, the constant dividend rate, inflation, and the uncertainties arising from regulatory policies.

Although the compound annual growth of per-share earnings was somewhat better for Iowa-Illinois than the average for other electric and combination electric-gas utilities during the eight years ended with 1965, the longer period from 1957 to 1970 as well as the years since 1965 show a reverse trend. The comparative growth rates were as follows:

	1957-1965	1957-1970	1965-1973
Iowa-Illinois	7.4%	4.8%	0.3%
79 electric and electric-gas utilities	6.7	5.7	3.9

Q. Have you considered the comparative trends in prices of the Iowa-Illinois and other common stocks?

A. Yes. The chart on page 38 of my exhibit shows the trends of common stock prices from a 1961-1963 base, comparatively for the Iowa-Illinois stock and the averages for broad cross-sections of utility and industrial stocks. I have constructed the index for the 79 major electric and electric-gas utilities. The other stock price indexes are as reported by Standard & Poor's for 60 utilities and for 425 industrials.

Q. Please describe the market price behavior shown by the chart.

A. The market price behavior of utility and industrial stocks has contrasted sharply over the past seven years. The price decline began in 1966 for Iowa-Illinois and most utility stocks. Industrial stock prices declined somewhat in 1966, but moved upward in 1967 and

1968 and, following the 1970 decline, moved upward again to a record level in the first quarter of 1973 and then declined sharply through the second quarter 1974. On the other hand, the market position of the Iowa-Illinois stock relative to other equity investments has declined almost continuously since 1965, due primarily to investor expectations of reduced earnings relative to alternative investment opportunities.

The comparative behavior of the stock prices over these seven years demonstrates the loss of investor confidence in the Iowa-Illinois stock.

In the third quarter of 1974, the Standard & Poor's index of 60 utility stock prices and the prices of the 79 electric and electric-gas utilities were 56 percent below the 1965 level, while the index of 425 industrial stock prices was 9 percent below that level. The price of the Iowa-Illinois stock in the third quarter of 1974 was 66 percent below the 1965 average, the all-time high for that stock. Stated otherwise, the real value of the Iowa-Illinois stock(price adjusted for loss of purchasing power) in the third quarter of 1974 was only 22 percent of the 1965 value. It is evident that investors believe they have better alternatives than investing their savings in the equity capital of Iowa-Illinois.

III-3. Evidence of the Current Cost of Common Stock Capital to Iowa-Illinois Gas and Electric Company

Q. What is the current cost of common stock capital?

A. The current cost of new capital to an enterprise is the rate at which prospective returns are discounted or capitalized in the market. Often called the investor's return requirement, it is the rate of earnings which investors believe to be in prospect and which is sufficient, relative to the price of the stock, to attract their savings from alternative investments of corresponding risk. The return requirement has two components: the current dividend yield and the anticipated rate of growth in earnings and dividends. Estimation of the current cost of new capital is a matter of informed judgment.

Q. How may the investor's return requirement be determined?

A. No reliable formula is available. Estimation of investor return requirements by reference to market prices of the stock is a process of <u>inferring</u> the rate at which investors are capitalizing expected income. The analyst cannot develop any direct evidence of investor expectations regarding dividends to be received in the long-term future. Such expectations must be estimated or imputed. Whatever the method of estimating equity capitalization rates, a conclusion is necessarily a judgment.

The ratio of current earnings to current market price is an indicator of investors' return requirements. Variations of the discounted cash flow method, including what I call the market value method, are frequently applied. These approaches look to historical growth rates plus current dividend yields as indicators of the rate at which investors are discounting anticipated returns.

Q. Have you applied the DCF formula for the purpose of estimating the current return required by investors in the common stock of Iowa-Illinois and in common stocks of similar investment risk?

A. Yes. I have considered dividend yields, rates of growth in per-share earnings, dividends, and book equity for Iowa-Illinois and the four reference groups -- the 79 electric utilities, the ten electric utilities, the eleven food processors, and the ten manufacturers. These data are set out on an annual basis through 1973 at pages 40 and 41 of my exhibit.

Q. What in your opinion is the meaning of these data under current conditions as indicators of the cost of common equity to Iowa-Illinois?

A. In applying the market value (DCF) formula, I used past rates of growth in per-share earnings, dividends, and book equity as proxies for investors' growth expectations, and imputed the growth component of the formula by subjecting the results to sensible judgment. The assumption is that investors formulate estimates of probable growth of benefits from ownership of common stocks upon historical trends. This application of the DCF formula may yield reliable results when growth rates have a stable history. On the other hand, when past earnings growth is unstable, no logical relationship exists between past growth rates and investor expectations.

In recent years, utility growth rates have declined and, in many instances, become negative, rendering the DCF formula (dividend yield plus growth rate), based upon past experience, meaningless as an indicator of current investor return requirements. When utility earnings are depressed and inadequate, as in recent years, prices paid for utility stocks tend to reflect investor hopes and expectations that better earnings will be allowed and realized. Additionally, the results of the formula do not reflect recent increases in risk and inflation premiums. In these circumstances, an estimate of the current cost of common equity to Iowa-Illinois depends upon analysis of other market data, including earnings/price ratios and earnings net proceeds ratios, with full recognition of the limitations of these measures.

Q. What are the limitations of earnings/price ratios as measures of return requirements?

A. Earnings/price ratios are useful measures of the equity capitalization rate under two conditions: (1) the reported earnings used to construct the earnings/price ratios are the same as the earnings anticipated by investors and (2) the market price of the stock represents investors' evaluations of the present worth of that income.

The earnings/price ratio understates the return requirement and the current cost of equity capital unless it is assumed (1) that the rate of earnings on book equity in original cost dollars would not rise under inflationary conditions, (2) that the rate of growth in per-share earnings would not exceed the growth rate afforded by the allowed rate of earnings on book equity, and (3) that the proceeds from the sale of new shares would not exceed per-share book equity.

Q. In December 1973, Iowa-Illinois sold 550,000 shares of additional common stock through an offer to underwriters. After underwriting discounts and commissions, the proceeds were $15.38 per share. What investor return requirement was indicated by the ratio of current earnings to proceeds?

A. Assuming that investors' return expectations were in the range of 11.4 to 12.0 percent on average book common equity in the third quarter of 1973, the indicated cost of equity capital was 14.2 to 14.9 percent. It will be noted that these percentages reflect market pressure and include financing costs other than expenses borne directly by the Company.

Q. Was the book equity of existing stockholders diluted as a consequence of the December 1973 sale of additional shares?

A. Yes. Book equity per share of $18.98 (at August 31, 1973, Prospectus) was diluted to $18.66 per share.

Q. If per-share earnings of $2.16 corresponding to a return of 11.4 percent on a book equity of $18.98 would attract new capital proceeds of $15.38, what earnings would be required to attract new proceeds equal to book equity per share and to avoid dilution?

A. Assuming no change in the market price per dollar of income, the rate of return on book common equity